

**GENERAL DESCRIPTION:** Originally five adjacent sites (1988 inventory), the areas were combined and renamed by the NC Natural Heritage Program. The five distinct portions of the larger site are described below:

### **Rich Mesic Slopes**

This stretch of the Eno possesses some of the richest forest slopes in Orange County. The north-facing slopes support a mesic mixed hardwood forest with an outstandingly diverse herb layer. Species include ginseng (*Panax quinquefolius*), a state-listed species of special concern, yellow lady's slipper (*Aconitum uncinatum*), and monkshood maidenhair fern (*Adiantum pedatum*).

### **Uplands and Vernal Pools**

The upland areas located south of the river consist of several flat-topped ridges divided by relatively deep ravines. This large expanse of uplands contains mature second growth forest along with areas that were timbered in the 1980s. The hardwood forest is composed mostly of oaks and hickories: red oak (*Quercus rubra*), white oak (*Q. alba*), black oak (*Q. velutina*), post oak (*Q. stellata*), spanish oak (*Q. falcata*), scarlet oak (*Q. coccinea*), mockernut hickory (*Carya tomentosa*), pignut hickories (*C. glabra* and *C. ovalis*), and others. The vegetation of this site is thus representative of the oak-hickory forest that historically predominated in the Piedmont. Although this type of habitat cannot be considered unique, it is this very "representativeness" that should be protected.

Also present on this site are two large vernal pools [Upland Depression Swamp Forests], depressions that fill solely with rainwater and have no stream inlet or outlet. Although each pool is unique in its vegetation, collectively they contain characteristic hydric species such as willow oak (*Quercus phellos*), overcup oak (*Q. lyrata*), buttonbush (*Cephalanthus occidentalis*), highbush blueberry (*Vaccinium* sp.), leucothoe (*Leucothoe racemosa*), and sphagnum (*Sphagnum* sp.). Two salamanders that characteristically breed in these types of pools and are documented for this site are the spotted salamander (*Ambystoma maculatum*) and marbled salamander (*A. opacum*); both require long-lasting, fish-free ponds for their larval development, and are thus restricted to these types of pools (although they also occur in lowland areas with rain-filled pools).

### **Buckwater Creek Ridge and Slopes**

Near the confluence of the Eno River and Buckwater Creek the river takes a 90-degree bend from running east to running south. The south-facing bluff at this point is the most extensive slope of its kind in the county. A massive outcrop, composed of felsic dacitic tuff, is exposed as a series of sunny ledges that rise 50 feet above the river and supports such xerophytic plants as the wooly lipfern (*Cheilanthes tomentosa*) and goat's rue (*Tephrosia virginiana*). On the slope directly above this outcrop grows an open forest dominated by post oak (*Quercus stellata*), many of which are over one foot in diameter. Other dry oaks include blackjack oak (*Q. marilandica*), black oak (*Q. velutina*), and white oak (*Q. alba*). Other woody species indicating the dryness of this area are sourwood (*Oxydendrum arboreum*), red cedar (*Juniperus virginiana*), scattered mountain laurel (*Kalmia latifolia*), and several species of blueberries (*Vaccinium* spp.).

Above this dry community the slopes become less steep, forming a long ridge running one and a half miles to the north. The forest here is less dry than the post oak forest to the south,